

ABSTRACT OF THE DISCLOSURE

5 An optical waveguide includes a first cladding, a second cladding,
and a core. The core is embedded in the first cladding so as to be exposed
on one principal surface of the first cladding that is opposed to the second
cladding. The first cladding and the second cladding are arranged so as to
sandwich the core. The core is a product formed by a reaction in which a
polymeric material that includes branched polysilane and polysiloxane is
10 subjected to at least one process selected from heating and ultraviolet
irradiation. The refractive index of the core is higher than the refractive
indices of the first cladding and the second cladding.